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P O Box 1450 Alexandria, Virgima 22313-1450 www.usplo.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

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 7590
 1050/2009
 EXAMINER

 Bio Technology Law Group
 ORASER, JEANNEER E

 12707 High Bluff Drive Stute 2009
 ARTUNT
 PAPER NUMBER

 Suite 2000
 ARTUNT
 PAPER NUMBER

San Diego, CA 92130-2037 DATE MAILED: 10/30/2009

l	10/773 792	02000004	THE THE PART OF	ANZ-1200-UT2	8458
ſ	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO

TITLE OF INVENTION: LISTERIA ATTENUATED FOR ENTRY INTO NON-PHAGOCYTIC CELLS, VACCINES COMPRISING THE LISTERIA, AND METHODS OF USE THEREOF

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	02/01/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. In equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PURLICATION FE

appropriate. All further indicated unless correcte maintenance fee notifical	correspondence includir ed below or directed oth	or transmitting the 1880 ig the Patent, advance of nerwise in Block 1, by (rders and notification of r a) specifying a new corres	naintenance fees will pondence address; a	If be mailed to the current and/or (b) indicating a se	should be completed where nt correspondence address as parate "FEE ADDRESS" for
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35938 BioTechnology 12707 High Blut Suite 200	ff Drive	/2009		Certi	ficate of Mailing or Trac	
San Diego, CA	02130-2037					(Depositor's name)
						(Signature)
						(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	1	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,792 TITLE OF INVENTION AND METHODS OF US		ATED FOR ENTRY IN	Thomas W. Dubensky JR. TO NON-PHAGOCYTIC	CELLS, VACCINI	ANZ-1200-UT2 ES COMPRISING THE	8458 LISTERIA,
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE TOTAL FEE(S) DU	E DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	02/01/2010
EXAM	INER	ART UNIT	CLASS-SUBCLASS			
GRASER, JI	ENNIFER E	1645	424-235100	•		
"Fee Address" ind. PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DATZ ess an assignee is ident h in 37 CFR 3.11. Comp	nge of Correspondence "Indication form ed. Use of a Customer A TO BE PRINTED ON	2. For printing on the p (1) the names of up to or agents OR, alternati- C2) the name of a single registered attorney or a registered patter attorney to 2 registered patter atto- listed, no name will be THE PATENT (print or typ T a substitute for filing an (B) RESIDENCE: (CITY	3 registered patent vely, e firm (having as a regent) and the names meys or agents. If no printed.	member a 2s of up to o name is 3e is identified below, the	document has been filed for
Please check the appropr	iate assignee category or	categories (will not be p	rinted on the patent):	Individual Cor	poration or other private g	roup entity 🚨 Government
4a. The following fee(s): Issue Fee Publication Fee (N	o small entity discount p		b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038	is attached.	e shown above) deficiency, or credit any an extra copy of this form).
	s SMALL ENTITY state	is. See 37 CFR 1.27.			ENTITY status. See 37	
NOTE: The Issue Fee and interest as shown by the i	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than t Office.	he applicant; a regist	ered attorney or agent; or	the assignee or other party in
Authorized Signature				Date		
Typed or printed name				Registration No		
This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C tiality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est r depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 mi idual case. Any con r, U.S. Patent and T D THIS ADDRESS.	e public which is to file (a inutes to complete, includ ments on the amount of rademark Office, U.S. De SEND TO: Commissione	nd by the USPTO to process) ing gathering, preparing, and time you require to complete partment of Commerce, P.O. r for Patents, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

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P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO	. F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/773,792	-	02/06/2004	Thomas W. Dubensky JR.	ANZ-1200-UT2	8458	
35938	7590	10/30/2009		EXAMINER		
BioTechnolo	gy Law Gr	oup	GRASER, JENNIFER E			
12707 High B		•	ART UNIT	PAPER NUMBER		
Suite 200	02120 200		1645			
San Diego, CA 92130-2037				DATE MAILED: 10/30/2009		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 329 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 329 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/773,792 DUBENSKY ET AL. Notice of Allowability Examiner Art Unit Jennifer F. Graser 1645 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 10/5/09. The allowed claim(s) is/are 22,38-41,76-83 and 90. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) \(\subseteq \text{Some* c) \subseteq \text{None of the:} a) \square All 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other .

/Jennifer E. Graser/ Primary Examiner, Art Unit 1645 Application/Control Number: 10/773,792

Art Unit: 1645

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: The closest prior art Appelberg et al (Infect. Immun, Feb. 2000, 68(2): 912-914) does not suggest deleting both actA and inIB in the context of retaining inIA. Appelberg et al. does not delete inlB in isolation; Appelberg et al. deletes the entire inlA/B operon. Thus, while one of skill in the art might arguably have been motivated from the Appelberg et al. to produce a mutant deficient in both actA and inIA/B (a point Applicants do not concede), one would not have been motivated to produce a mutant deficient in actA and inIB while leaving inIA intact. The specification has shown unexpected results through the retention of the inIA gene. Further, the obviousness-type double patenting rejection as being unpatentable over claims 1-66, 69-72, 74-76, 88-93, 102-109, 11-116, 118-128 of copending Application No. 10/883.599 has been withdrawn. The amendment of the co-pending claims has obviated this rejection. The amendment of the present claims and the copending claims in 10/773,792 has also obviated the former obviousness-type double patenting rejection against said claims of that application.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Correspondence regarding this application should be directed to Group Art Unit 1645. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Remsen. The faxing of such papers must conform with the notice published in the Application/Control Number: 10/773,792

Art Unit: 1645

Official Gazette, 1096 OG 30 (November 15,1989). The Group 1645 Fax number is 571-273-8300 which is able to receive transmissions 24 hours/day, 7 days/week.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see https://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer E. Graser whose telephone number is (571) 272-0858. The examiner can normally be reached on Monday-Thursday from 8:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Mondesi, can be reached on (571) 272-0956.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-0500.

/Jennifer E. Graser/ Primary Examiner, Art Unit 1645

10/20/09